

**ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM**

**Plant Abstract**

**Element Code:** PMLIL210C0

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Triteleia lemmoniae* (S. Wats.) Greene

**COMMON NAME:** Mazatzal Triteleia, Oak Creek Triteleia, Oak Creek triplet-lily, Lemmon's Star

**SYNONYMS:** *Brodiaea lemmonae* S. Wats., *T. lemmonae* (variation in Lit.)

**FAMILY:** Liliaceae

**AUTHOR, PLACE OF PUBLICATION:** *Brodiaea lemmonae* S. Wats., Proc. Amer. Acad. Arts 20: 376. 1885. *Triteleia lemmoniae* (S. Wats.) Greene, Bull. Cal. Acad. Sci. 2(6): 141. 1886.

**TYPE LOCALITY:** Oak Creek near Flagstaff, Coconino County, Arizona, United States of America.

**TYPE SPECIMEN:** HT: GH-30186. J.G. Lemmon 3347, Aug 1884.

**TAXONOMIC UNIQUENESS:** *Triteleia lemmoniae* is 1 of 15 species in the genus, and is closely related to *Triteleia hyacinthinia*. However, the range of this species completely separates it genetically from all other members of the genus. The species name was originally *Brodiaea lemmonae*, but was named *T. lemmoniae* by Greene. Both variations of the species epithet exist in literature today.

**DESCRIPTION:** Herbaceous perennial with stems naked, up to 9 in (23 cm) tall. One to two dark green leaves up to 6 in (15 cm) long. Inflorescence consists of an umbel with all rays more or less elongate and nearly equal. Small involucel bracts are lanceolate or oblong. The star-shaped flowers are bright yellow fading to purplish, with lobes twice as long as the turbinate tube. The stamens are all alike, and the filaments are not winged. The arrowhead-shaped anthers are versatile, sagittate, and not appressed to the style. The stigma is obscurely lobed, and the ovary is short-stipitate; seeds not elongate.

**AIDS TO IDENTIFICATION:** Range and distinctive flower color separate this species from others.

**ILLUSTRATIONS:** Color photos (Hamilton in

[http://www.ibiblio.org/pbs/pbswiki/files/Triteleia/Triteleia\\_lemmonae2.jpg](http://www.ibiblio.org/pbs/pbswiki/files/Triteleia/Triteleia_lemmonae2.jpg) and  
[http://www.ibiblio.org/pbs/pbswiki/files/Triteleia/Triteleia\\_lemmonae3.jpg](http://www.ibiblio.org/pbs/pbswiki/files/Triteleia/Triteleia_lemmonae3.jpg))

Color photo (Epple, 1995)

Color photo (Rickett, 1970)

**TOTAL RANGE:** Arizona endemic. Ranges from Apache and Navajo counties, to Coconino County (Oak Creek, and Flagstaff and Mogollon escarpment), northern Gila County, and Yavapai County.

**RANGE WITHIN ARIZONA:** See "Total Range."

### **SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Herbaceous perennial.

**PHENOLOGY:** Flowers from May to August.

**BIOLOGY:** This species has the ability to reproduce by simple division of the corm. The corm allows the plant to withstand years of poor moisture in the same manner that onions do. Therefore, this species would tend to be inconspicuous in poor moisture years and be at least locally abundant in good years.

**HABITAT:** Grows in sparse pine woodlands in partial shade of pines. Typically a member of the yellow pine forest, being found as an understory plant along streams, in boggy areas, near ponds and lakes, in open meadows or pastures, and on rocky hillsides.

**ELEVATION:** Elevation ranges from 3,200 - 7,680 ft (975-2,340 m) based on unpublished records in the HDMS (AGFD, 2004). McDougall (1973) reports elevation range of 5,000-7,500 ft. (1525-2286 m).

**EXPOSURE:** Unknown

**SUBSTRATE:** Reported substrate includes parent material of sandstone and volcanic origins.

**PLANT COMMUNITY:** Pine Woodlands.

**POPULATION TRENDS:** In 1978, Fletcher determined at that time, that there were no threats to the continued existence of *Triteleia lemmoniae*.

### **SPECIES PROTECTION AND PRESERVATION**

**ENDANGERED SPECIES ACT STATUS:**

None

**STATE LIST STATUS:**

Salvage Restricted (ARS, ANPL 1999)  
[Salvage Restricted (ARS, ANPL 1993)]

**OTHER STATUS:** None

**MANAGEMENT FACTORS:** The status of *Triteleia lemmoniae* should be monitored periodically. The palatability of this species to herbivores is not known, but it is expected that the plant is consumed occasionally.

**CONSERVATION MEASURES TAKEN:** Unknown

**SUGGESTED PROJECTS:** Studies of the habitat requirements, and attempts to determine the range and current population status of this species, should be performed.

**LAND MANAGEMENT/OWNERSHIP:** BLM - Phoenix Field Office; USFS – Coconino, Apache-Sitgreaves, and Tonto National Forests; Private.

## **SOURCES OF FURTHER INFORMATION**

### **REFERENCES:**

- Arizona Revised Statutes. 1993. Arizona Native Plant Law, Appendix A.  
Arizona Revised Statutes. 1999. Arizona Native Plant Law, Appendix A.  
BONAP. Available:  
[http://www.csd.tamu.edu/FLORA/cgi/b98\\_map?genus=Triteleia&species=lemmoniae](http://www.csd.tamu.edu/FLORA/cgi/b98_map?genus=Triteleia&species=lemmoniae).  
Epple, A.O. & L.E. Epple. 1995. A Field Guide to the Plants of Arizona. Falcon. Helena, Montana. P. 25.  
Fletcher, R. 1978. *Triteleia lemmoniae*. USFS Report.  
Greene. 1886. Bull. Cal. Acad. 2:141.  
Hamilton, R. Available:  
[http://www.ibiblio.org/pbs/pbswiki/files/Triteleia/Triteleia\\_lemmonae2.jpg](http://www.ibiblio.org/pbs/pbswiki/files/Triteleia/Triteleia_lemmonae2.jpg) and  
[http://www.ibiblio.org/pbs/pbswiki/files/Triteleia/Triteleia\\_lemmonae3.jpg](http://www.ibiblio.org/pbs/pbswiki/files/Triteleia/Triteleia_lemmonae3.jpg).  
Harvard University Herbaria (HUH). 2001. Index of Botanical Specimens. Accessed: 2/11/2004, from <http://brimsa.huh.harvard.edu/cms-wb/specimens.jsp>.  
Hoover, R. F. 1941. American Midland Naturalist. Vol. 25.  
Integrated Taxonomic Information System (ITIS). Retrieved 2/11/2004 from ITIS, <http://www.itis.usda.gov>.  
Kearney, T.H., R.H. Peebles, with collaborators. 1951. Arizona flora. Second edition with supplement by J.T. Howell, E. McClintock and collaborators. 1960. University of California Press, Berkeley. p. 182.  
Lehr, J.H. 1978. A catalogue of the flora of Arizona. Desert Botanical Garden. Phoenix, Arizona. p. 33.  
McDougall, W.R. 1973. Seed plants of Northern Arizona. The Museum of Northern Arizona. Flagstaff, Arizona. p. 108.  
Missouri Botanical Garden – TROPICOS, Nomenclatural Data Base. *Triteleia lemmoniae* (S. Watson) Greene. [http://mobot.mobot.org/cgi-bin/search\\_vast](http://mobot.mobot.org/cgi-bin/search_vast). Accessed: 11 Feb 2004.

- NatureServe Explorer: An online encyclopedia of life [web application]. 2003. Version 1.6. Arlington, Virginia, USA: NatureServe. Available: <http://www.natureserve.org/explorer>. (Accessed: January 29, 2004).
- Rickett, H.W. 1970. Wild Flowers of the United States: The Southwestern States, Southern California, Arizona and New Mexico. Vol. Four, Part One. McGraw-Hill Book Company, New York, New York. p. 88.
- USDA, NRCS. 2002. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
- Watson, S. 1885. Proc. Am. Acad. 20: 376.

**MAJOR KNOWLEDGEABLE INDIVIDUALS:**

Reggie Fletcher - USFS SW Regional Ecologist, Albuquerque, New Mexico.

**ADDITIONAL INFORMATION:**

**Revised:** 1989-11-06 (???)  
2004-01-30 (AMS)  
2004-02-11 (SMS)

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